

CLAIMS

What is claimed is:

- 5 1. A method for sharing a storage device among a plurality of computers while
 providing data integrity in the storage device, the method comprising the
 steps of:
 registering the computer with the storage device by storing in the
 storage device a computer identifier associated with a reserved access type in
10 the storage device; and
 upon loss of a knowledge of the stored identifier in the shared storage
 device by the registered computer, replacing the identifier for the registered
 computer stored in the shared storage device with a new identifier for the
 registered computer.
- 15 2. The method as claimed in Claim 1 wherein the registered computer is a
 currently registered computer.
- 20 3. The method as claimed in Claim 1 wherein the registered computer is a
 previously registered computer.
- 25 4. An apparatus for sharing a storage device among a plurality of computers
 while providing data integrity in the storage device, the apparatus
 comprising:
 a register routine which registers a computer with a storage device by
 storing in the storage device a computer identifier associated with a reserved
 access type in the storage device and upon detection of loss of knowledge of
 the stored computer identifier in the shared device by the registered computer
30 replaces the identifier for the registered computer stored in the shared storage
 device with a new identifier for the registered computer.

5. An apparatus as claimed in Claim 4 wherein the registered computer is a currently registered computer.
6. An apparatus as claimed in Claim 4 wherein the registered computer is a previously registered computer.
7. An apparatus for sharing a storage device among a plurality of computers while providing data integrity in the storage device, the apparatus comprising:
 - means for registering the computer with a shared storage device by storing in the storage device an identifier associated with a reserved access type for the shared storage device; and
 - upon detection of loss of knowledge of the stored identifier in the shared device by the registered computer, means for replacing the identifier for the registered computer stored in the shared storage device with a new identifier for the registered computer.
8. An apparatus as claimed in Claim 7 wherein the registered computer is a currently registered computer.
9. An apparatus as claimed in Claim 7 wherein the registered computer is a previously registered computer.
10. An apparatus as claimed in Claim 7 wherein the identifier for each computer is unique.
11. A computer system comprising:
 - a central processing unit connected to a memory bus by a system bus;
 - an I/O system, connected to the system bus by a bus interface; and
 - a routine for providing data integrity in a storage device shared by the computer system with another computer system, the routine:

registering the computer with the shared storage device by storing in the storage device an identifier associated with a reserved access type for the shared storage device; and

5 upon loss of a knowledge of the stored identifier in the shared storage device by the registered computer, replacing the identifier for the registered computer stored in the shared storage device with a new identifier for the registered computer.

12. A computer program product for providing data integrity in a storage device
10 shared by a plurality of computers, the computer program product comprising a computer usable medium having computer readable program code thereon, including program code which:

15 registers the computer with the shared storage device by storing in the storage device an identifier associated with a reserved access type for the shared storage device; and

 upon loss of a knowledge of the stored identifier in the shared storage device by the registered computer, replaces the identifier for the registered computer stored in the shared storage device with a new identifier for the registered computer.

20